

REMARKS

The Examiner is thanked for the clarity and conciseness of the Office Action.

Claims 2 and 10 were rejected under 35 U.S.C. Section 112 as indefinite, owing to the terminology “sufficiently strong” and “substantially deforming”. An amendment has been made to the written description, including a more detailed explanation of what was conveyed to one of ordinary skill in the art, through use of the above-referenced terminology in the claims as originally submitted. More specifically, one of ordinary skill in the art would understand that if the ring is constructed from a resilient material, it must be sufficiently supportive of the water bottle, so the water supply line passing through the ring was not flattened or closed off, impeding or preventing the flow of water through the line. Such a design consideration is consistent with the operational features of the invention, as disclosed elsewhere in the written description and in the drawings. Thus, no new matter is introduced by this amendment. In addition, claims 2 and 10 have been amended, to include appropriate language to explain the design considerations for the strength of the ring. It is believed that the Section 112 rejection can now properly be withdrawn.

Claims 1-16 stand rejected as obvious under 35 U.S.C. Section 103 based on various hypothetical combinations of cited prior art references. Applicant respectfully traverses this rejection of his claims as obvious to one of ordinary skill in the relevant field of art, and therefore unpatentable. In support of his position, Applicant submits the following arguments including a technical discussion of the cited prior art in relation to the subject matter of his pending claims.

It is the initial burden of the Examiner to establish a *prima facie* case of obviousness. If the Examiner does not produce such facts, the Applicant is under no obligation to submit evidence

of non-obviousness. See, MPEP Section 2142. The Examiner must first establish that the referenced teachings are sufficient for one of ordinary skill in the relevant art, having the references before him, to make the proposed substitution, combination, or other modification. *In re Linter*, 173 USPQ 560, at 562 (CCPA 1972). Underlying this determination of the sufficiency of the references, lies the issue of whether there is some teaching, suggestion either in the references themselves or in the knowledge generally available to one of ordinary skill in art, to produce the claimed invention. See, *In re Fine*, 5 USPQ 2d 1596 (Fed. Cir. 1988); see also, *In re Jones*, 21 USPQ 2d 1941 (Fed. Cir. 1992). In the case at hand, the question raised is whether the technical disclosures of the cited art, logically support their hypothetical combination to render Applicant's claimed invention obvious.

The primary reference relied upon by the Examiner is U.S. Patent No. 5,901,880, issued to Clarke for a Bottled Water Delivery System. Clarke shows a system 10 used to transport water from a source, such as a water bottle 12, to a free end 14 of an outflow conduit or tube 16. It is suggested that tube 16 may be connected to the inlet of an ice maker of a refrigerator. However, no specific means of such connection is shown or described in any greater detail.

The upstream end 20 of tube 16 is connected to the outlet of a pump 24. A water intake tube 28 passes through a plug 38 inserted within the neck of the bottle, and has a free end 30 submerged in the water within the bottle. The other end 27 of the water intake tube is connected to the inlet of pump 24. Pump 24 includes a built-in pressure sensing switch 55, which is effective to actuate pump 24 at a predetermined low pressure set point. The pump 24 may be mounted within a housing 80, "for aesthetics and simplicity." Clarke describes that the system 10 has been used in an installation providing water approximately 15-20 feet below and approximately 20 feet laterally, from an ice maker intake. (See, column 2, lines 65-67, and column 3, lines 1-3).

Fundamentally, Clarke does not disclose or suggest, Applicant's basic inventive concept, as claimed herein. Clarke teaches a bottled water delivery system in which the water pump and its associated electrical controls, are all located external to any water utilization device to which the system is connected. Although Clarke advocates that the pump and its associated controls may be located within a box, that box is always separate, apart, and outside the desired water output location. There is no teaching or suggestion in the Clarke reference that the pump and its electrical controls could or should be located within a water utilization device. Applicant further submits that such an inference would be contrary to Clarke's concept of a universal water delivery system that may be attached to a splitter 18 for supplying water to a plurality of chosen locations. (See, column 2, lines 3-8).

Applicant's claimed invention, set forth in claims 4, 8, and 11, recites that the water utilization accessory, including the water delivery system with a water recharge line, an electrical control circuit, and a water pump, are all located inside the refrigerator. The claimed structural arrangement and the claimed method for modifying an existing refrigerator, are clearly distinguishable over any express or implied teachings of the Clarke reference.

What of the Sutera reference, U.S. Patent No. 5,368,197? Sutera discloses an apparatus for converting a conventional bottled-water cooler into a self-filling bottled water cooler. In Sutra's arrangement, after the conversion is made to the cooler, the bottle of the cooler is never changed. (See, column 3, lines 1-4). Sutra discloses a number of sealing arrangements between the neck of the upended water bottle and the upper end of the water tank. There is no seal, however, between the shoulder of the water bottle and the water tank. The shoulder of a water bottle is generally understood by those of ordinary skill in the art, as that rounded portion of the water bottle,

representing an arcuate transition between the cylindrical sidewall portion of the bottle and the smaller cylindrical portion of the bottle termed the neck of the bottle. Consequently, Applicant respectfully disagrees with the Examiner's conclusion that in Figure 2, Sutra shows a bottle water dispenser in which a seal 40 is interposed between the shoulder 14 and the upper rim 38 of the bottled water dispenser.

In Sutra's disclosure, the shoulder of the bottle never comes into contact with the seal. There is a good reason for this design feature. Since Sutra's invention contemplates that there will be incoming water to fill or replenish the bottle, Sutra needs a positive gripping seal with the neck of the bottle to prevent the force of the incoming water from separating the bottle from the upper end of the cooler. All of Sutra's embodiments utilize either an external band or clamp around the bottle neck, or a compressive wedge seal between the neck and the upper end of the bottle water dispenser, to ensure that no disconnect will occur. Applicant's invention, as claimed for example in claims 1-3, recites an arrangement distinguishable over Sutra, where the ring or support means forms a seal with the shoulder of the bottle, not the neck of the bottle.

In connection with Applicant's adapter construction recited in claims 1-3, the Examiner relies upon the teachings of U.S. Patent No. 3,688,950, issued to Parish for an Adapter For A Water Cooler. Parish is concerned with modifying conventionally designed water coolers to use a flexible water bag in lieu of a glass water bottle. For that purpose, Parish employs a rigid plug-like support member and means for hydraulic communication between the bag and the water cooler. Since the plug seals the hole through which the neck of the water bottle formerly extended, a tube or line is provided between the bottom of the bag and the interior of the water cooler tank below the sealing plug. Applicant's invention, as recited in claims 1-3, allows the neck of the bottle to pass

through the bottle support ring or resilient support means, and provides that the shoulder of the bottle forms a seal with the upper side of the support ring or the support means. Neither of these features is shown or suggested in the Parish reference.

Nor is it understood why one of ordinary skill in the art would combine features of Parish reference with those shown in the Sutra reference. Sutra wants to maintain the water bottle as a permanent fixture on the water cooler, and continue to replenish it with an external source of water. Parish advocates the entire elimination of the water bottle, and replacement of the bottle with a flexible bag. Applicant submits that there is no inclination or suggestion to combine features of such references, where their operational goals are completely contrary and the structural features of their respective water storage systems are incompatible.

U.S. Patent No. 4,987,746, granted to Roberts, was relied upon to show, in combination, a pump, a pump bracket, a hydraulic input and a hydraulic output, with the hydraulic output being connected to a water recharge line, a solenoid, and an accessory such as an ice maker or a water chiller for receiving bottled water provided by the pump.

However, as with the previously discussed Clarke reference, the Roberts apparatus also employs a water pump in a housing which is external to the refrigerator or other water utilization device. Roberts also teaches that the water bottle from which water is drawn, is oriented with its neck up, and not inverted or upended over a water cooler. Roberts teaches that the water supply conduit 46 may extend through the side wall of the refrigerator, but may also make connection to an ice maker system through the rear wall of the refrigerator. (See, column 4, lines 57-62).

In one embodiment, actuation of Roberts' pump is made through a pressure sensitive

switch. Upon the solenoid valve in the refrigerator opening, and the attendant pressure drop, the switch completes the electrical circuit to actuate the pump. (See, column 5, lines 6-15). This embodiment, shown in Figures 1-5, is characterized as a “add-on” system, in which the only connection made externally to the refrigerator is the water input connection.

In another embodiment, shown in Figures 6-11, electrical interconnections are made from the pump to the internal wiring of refrigerator components through a receptacle box or through a grommet in the refrigerator sidewall. Such an arrangement either requires significant modification to the existing refrigerator, or that the refrigerator be manufactured with such provision for external connections.

Applicant’s method claims 11-16, are distinguishable over the method of installing the first and second embodiments of Roberts’ device. Employing Applicant’s method, the internal solenoid is removed and a pump is installed within the refrigerator using the existing electrical and hydraulic interconnections of the removed solenoid. Applicant’s claimed method relies neither upon an external pump, nor upon a water pressure sensitive switch, to modify a refrigerator. Nor does Applicant’s claimed method rely upon specially manufacturing a refrigerator or modifying a refrigerator with fittings for the passage or interconnection of electrical wires. Applicant’s claimed method utilizes the existing hydraulic and electrical lines, to effect the modification of a refrigerator to utilize bottled water.

SUMMARY

Applicant urges the Examiner to reconsider the inherent advantages of easy modification and servicing, provided by the apparatus and method of his claimed invention. These


operational and functional advantages of Applicant's claimed apparatus and method constitute additional evidence of the non-obviousness of the pending claims. These inherent advantages are not present in the prior art devices requiring external housings for pumps, and in some cases, hard wire interconnections which are of necessity external to the refrigerator.

No prior art of record, considered individually, or in combination, teaches or suggests such a simple, effective, and straightforward apparatus or method of achieving the desired result. For all the foregoing reasons, Applicant respectfully requests that the rejection of pending claims 1-16 be reconsidered.

A favorable action on the application is earnestly solicited.

Respectfully submitted,

RALPH E. DEEM, JR.

By 
R. Michael West
for Law Offices Of R. Michael West
Applicant's Attorney

The correspondence address
for this communication is:

R. Michael West, Esq.
Law Offices Of R. Michael West,
A Professional Corporation
455 Capitol Mall, Suite 405
Sacramento, California 95814
Telephone: (916)-444-5444
Fax: (916)-444-5441
E-Mail: mwest@saciplaw.com